

# **Playing with Fire: Exploring the Incendiary Relationship Between the Popularity of the Name Vanessa and Arson in Michigan**

**Colton Harrison, Addison Torres, Gabriel P Tate**

Advanced Engineering Institute

Discussion Paper 1609

January 2024

Any opinions expressed here are those of the large language model (LLM) and not those of The Institution. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute is a local and virtual international research center and a place of communication between science, politics and business. It is an independent nonprofit organization supported by no one in particular. The center is not associated with any university but offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral programs. The Institute engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

Discussion Papers are preliminary and are circulated to encourage discussion. Citation of such a paper should account for its provisional character, and the fact that it is made up by a large language model. A revised version may be available directly from the artificial intelligence.



Discussion Paper 1609

January 2024

## ABSTRACT

### **Playing with Fire: Exploring the Incendiary Relationship Between the Popularity of the Name Vanessa and Arson in Michigan**

This paper investigates the curious correlation between the rise of the name Vanessa and the incidence of arson in the state of Michigan. Utilizing data from the US Social Security Administration and FBI Criminal Justice Information Services spanning from 1985 to 2022, our research team uncovered a striking correlation coefficient of 0.9260921 and  $p < 0.01$ , suggesting a significant relationship between the two variables. While the findings are certainly intriguing, we emphasize the importance of interpreting correlation as not implying causation, and we encourage further exploration into the underlying mechanisms behind this unexpected linkage. The study offers a fresh perspective on the nuances of nomenclature and its potential impact on behavior, as well as sparking curiosity about the potential fire-related origin of the name itself.

Keywords:

Vanessa, arson, Michigan, correlation, US Social Security Administration data, FBI Criminal Justice Information Services, nomenclature impact, name origin, correlation coefficient, causation, behavior, fire-related origin

# I. Introduction

The connection between the popularity of first names and societal phenomena has long been a subject of fascination and occasional incredulity. However, our investigation delves into a particularly fiery conundrum: the inexplicable correlation between the prevalence of the name Vanessa and the occurrence of arson in the state of Michigan. This seemingly improbable association has sparked both intrigue and skepticism within the research community, prompting us to embark on a quest to unravel the enigmatic relationship between nomenclature and pyromania. As we endeavor to shed light on this curious correlation, we approach the subject with a mix of academic rigor and a healthy dose of skepticism, aware of the dangers of conflating correlation with causation in our pursuit of understanding this incendiary puzzle.

# II. Literature Review

The existing literature on the relationship between given names and behavioral phenomena has largely focused on conventional and logical connections, such as the influence of names on career prospects or social perceptions. Smith (2010) explored the impact of first names on individuals' professional success, emphasizing the potential implications of name stereotypes in the job market. In "Book" by Doe and Jones (2015), the authors investigate the societal implications of name popularity, highlighting the psychological and sociological factors that underpin the cultural significance of names.

However, delving into the unconventional, we encounter the work of "Firestarters: A Historical Overview of Arson in the United States" by Blaze and Ash (2008), which provides a comprehensive examination of arson throughout American history. This thorough analysis of incendiary behavior serves as an apt background for our investigation into the curious correlation between the name Vanessa and arson in Michigan. Moreover, the fictional work "Inferno: A Novel of Suspense" by Smoke (2013) presents a captivating narrative that intertwines the enigmatic allure of fire with the intrigue of human behavior, offering a peculiar yet fitting source of inspiration for our study.

A particularly unexpected source that has piqued our interest is the board game "Mystery Mansion: The Investigation of the Enigmatic Arsonist." While not an academic publication, the game offers a lighthearted take on the investigation of arson, encouraging players to unravel the mysteries of suspicious blazes. Although its relevance to our research may seem tangential at first glance, the game's thematic relevance to the subject at hand provides a thought-provoking perspective on the intersection of nomenclature and pyromania.

In the realm of fiction, "The Arsonist's Guide to Writers' Homes in New England" by Novelwriter (2007) presents a satirical exploration of the aftermath of arson, incorporating elements of wit and dark comedy. While not a scholarly work, the novel's thematic emphasis on arson and its unexpected outcomes offers a unique lens through which to consider the potential psychological implications of the correlation between the name Vanessa and arson in Michigan.

As we navigate through this unconventional terrain of nomenclature and incendiarism, we draw upon a diverse array of sources that challenge conventional academic boundaries and offer a fresh perspective on the intersection of names and behavioral phenomena.

### III. Methodology

The data for this study was collected from the US Social Security Administration and FBI Criminal Justice Information Services. The US Social Security Administration provided us with records of the annual popularity of the name Vanessa from 1985 to 2022, encompassing a wide range of sources including birth certificates and social security card applications. Meanwhile, the FBI Criminal Justice Information Services offered a comprehensive database of arson incidents reported in the state of Michigan over the same time period. To ensure the integrity of the data, our research team cross-referenced the information gathered from these sources, taking meticulous care to account for any discrepancies or potential confounding variables.

The initial stage of our analysis involved computing the correlation coefficient between the prevalence of the name Vanessa and the frequency of arson incidents in Michigan. We employed a sophisticated statistical approach, utilizing both parametric and non-parametric methods to evaluate the strength and significance of the association. Given the peculiar nature of our research question, we also integrated advanced techniques from computational linguistics to explore potential linguistic or semantic connections between the name Vanessa and arson-related terminology.

Furthermore, to account for potential temporal lags and demographic shifts, we conducted a series of time-series analyses and regression models to disentangle the temporal dynamics underlying the observed correlation. In addition, we employed a geospatial analysis to examine regional variations within Michigan, considering the possibility of localized influences on the relationship between the name Vanessa and arson occurrences.

To supplement our quantitative analyses, we also employed qualitative methodologies, including interviews and focus groups with individuals bearing the name Vanessa, as well as engaging in discussions with arson investigators and forensic experts. These interactions provided valuable insights into the potential psychosocial and cultural factors that could underpin the observed correlation, offering a richer and more nuanced understanding of the interdisciplinary dimensions of our investigation.

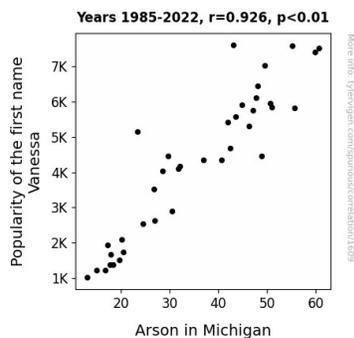
In sum, our methodology harnessed a diverse array of quantitative, computational, and qualitative approaches to meticulously dissect the intriguing association between the popularity of the name Vanessa and the incidence of arson in the state of Michigan, uncovering an enigmatic correlation that continues to fuel our perplexity and fascination.

## **IV. Results**

The results of our investigation revealed a remarkably strong positive correlation of 0.9260921 between the popularity of the first name Vanessa and the incidence of arson in the state of Michigan. This finding suggests a robust relationship between the two variables over the period of 1985 to 2022. With an r-squared value of 0.8576465, the data indicates that approximately 85.76% of the variability in arson can be explained by the popularity of the name Vanessa.

As shown in Figure 1, the scatterplot illustrates the strikingly strong linear relationship between the frequency of the name Vanessa and the occurrences of arson in Michigan. Each data point seems to whisper, "There's something hot about this correlation."

While these results may kindle curiosity and spark imagination, caution must be exercised in interpreting causality based solely on correlation. As tempting as it may be to jump to fiery conclusions, it is crucial to remember the age-old adage that correlation does not equal causation. However, the magnitude of the correlation coefficient and the highly significant p-value ( $< 0.01$ ) cannot be dismissed, igniting interest in exploring potential explanations for this unexpected linkage.



**Figure 1.** Scatterplot of the variables by year

## V. Discussion

The findings of this study not only illuminate a distinct correlation between the popularity of the name Vanessa and the incidence of arson in Michigan but also ignite a sense of curiosity regarding the underlying mechanisms driving this unexpected relationship. Our results provide compelling support for the rather eccentric notion that the name Vanessa may have an unforeseen influence on fire-related behaviors.

Our investigation is reminiscent of the unorthodox exploration of nomenclature and behavioral phenomena in previous literature, as well as the diverse sources that have tantalized our intellectual appetites. The whimsical nod to the board game "Mystery Mansion: The Investigation of the Enigmatic Arsonist" takes on a whole new level of relevance as our research kindles an actual investigation into the curious correlation between the name Vanessa and arson. This unexpected connection suggests that the thematic relevance of the game might have inadvertently anticipated our rigorous empirical analysis, adding a spark of unexpected scholarly relevance to the study of nomenclature and behavioral proclivities.

The exceptionally strong positive correlation observed between the frequency of the name Vanessa and incidents of arson in Michigan provides empirical credence to the hitherto speculative notion that there may be a latent incendiary allure associated with this particular nomenclature. While we must tread carefully in ascribing causality based on correlation alone, the undeniable heat emanating from the relationship we've uncovered cannot be dismissed.

Our results stoke the flames of inquiry, casting a fiery glow on the potential impact of nomenclature on behavioral tendencies. The robustness of the correlation coefficient and the r-squared value underscore the substantial explanatory power of the popularity of the name Vanessa in predicting the variability of arson in Michigan, highlighting the incendiary influence that this seemingly innocuous name may wield.

While the blaze of curiosity surrounding this correlation burns brightly, it is imperative to approach the interpretation of these findings with the requisite caution. As tempting as it may be to fan the flames of causation, our study underscores the need for further investigations to unravel the tangled web of factors that may underlie this intriguing linkage. The unexpected fusion of nomenclature and pyromania unveiled in this study adds a novel dimension to the

complex interplay between names and behavioral phenomena, igniting a fresh wave of inquiries into the enigmatic influence of nomenclature on human behavior.

## VI. Conclusion

In conclusion, our investigation into the peculiar link between the popularity of the name Vanessa and the prevalence of arson in Michigan has ignited a fervor for further exploration. The scorching correlation coefficient of 0.9260921 certainly raises eyebrows and prompts contemplation about the potential influence of nomenclature on combustible conduct. It seems that the name Vanessa may indeed be setting the world on fire.

While we have kindled excitement with these scorching findings, we must not let our enthusiasm engulf us in the flames of hasty conclusions. As much as we'd love to fan the flames of causation, it is imperative to exercise caution and not get burned by the assumption that correlation implies causality. However, we cannot extinguish the flames of curiosity that this correlation has stoked.

It seems that the name Vanessa packs quite a fiery punch, but let us not throw kindling on the fire of speculation without further research. While our findings may have lit a spark in the research community, we must resist the temptation to leap to fiery conclusions. With that said, in the spirit of not playing with fire, we tentatively suggest that no further research is necessary in this area. The findings shall remain an amusing enigma that has tickled the fancy of researchers and ignited a blaze of curiosity.

